

ST. JOSEPH'S COLLEGE OF ENGINEERING AND TECHNOLOGY, THANJAVUR

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

EDUCATIONAL ORGANIZATION MANAGEMENT SYSTEM USING SERVICENOW

TEAM ID: NM2025TMID01593

TEAM SIZE: 3

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PROBLEM STATEMENT

Educational institutions face multiple challenges in managing academic and administrative processes such as student services, faculty management, course registration, and IT support. Manual handling of these operations leads to inefficiency, data inconsistency, and delayed communication between departments. There is a need for a digital solution that can automate workflows, improve collaboration, and ensure transparency within the organization.

OBJECTIVE

The main objective of this project is to develop a comprehensive Educational Organization Management System using ServiceNow.

This system aims to:

- Automate academic and administrative workflows.
- Improve communication between students, faculty, and administrative departments.
- Provide centralized access to student and staff data.
- Enable real-time tracking of service requests and academic activities.
- Enhance transparency and operational efficiency across the institution.

SKILLS REQUIRED

1. ServiceNow Development – Table creation, Form design, Flow Designer, UI Builder.
2. Scripting in ServiceNow – JavaScript / Glide Script.
3. Workflow Automation & Notifications.
4. Data Management & Reporting – Report Designer, Performance Analytics.
5. User Interface and Experience Design.

TASK INITIATION

- Design and create ServiceNow tables for Students, Faculty, and Departments.
- Develop forms for academic requests, leave approvals, and feedback.
- Configure Flow Designer for automated task assignment and approval.
- Implement business rules for validation and notifications.
- Generate analytical reports and dashboards for administrators.

FEATURES

- Centralized database for student, faculty, and course information.
- Automated workflows for leave requests, admissions, and IT support.
- Service catalog for student services (ID card issue, certificate request, etc.).
- Real-time notifications and status tracking.
- Reporting dashboard for academic and administrative KPIs.
- Role-based access for students, faculty, and administrators.
- Integration with existing Learning Management Systems (LMS).
- User-friendly interface with secure data handling.

MODEL IMPLEMENTED

1. Data Model

- Table 1: u_student_info – Stores student details such as name, department, year, and enrollment number.
- Table 2: u_faculty_info – Stores faculty details, subjects handled, and department.
- Table 3: u_service_request – Records service requests like leave, ID card, or IT issues.
- Reference fields link all tables for easy tracking and reporting.

2. Process Model

- User submits a request (student/faculty).
- Request stored in u_service_request table.
- Flow Designer routes request to respective department head.
- Approval or resolution triggers automated notifications.
- Dashboard updates automatically with real-time data.

3. Logical Model

- Flow Designer handles approval and notification workflows.
- Business Rules manage validation and role-based actions.
- UI Policies control field visibility and mandatory inputs.
- Client Scripts perform real-time field updates.

4. Functional Model

- Automated approval for academic and administrative requests.
- Role-based access control for users.
- Automatic email or system notifications on task completion.
- Integration with reports and dashboards.

5. Output Model

- Dashboard showing requests, approvals, and status overview.
- Graphical reports for student and faculty activities.
- Department-wise workload and service performance analytics.
- Notifications for pending approvals and completed requests.

IMPLEMENTATION STEPS

STEP 1: Creation of a new update set in ServiceNow.

STEP 2: Creation of necessary tables for Students, Faculty, and Service Requests.

STEP 3: Defining relationships between tables (e.g., department → student → request).

STEP 4: Designing forms and list layouts for data entry and tracking.

STEP 5: Configuring roles and access controls (Admin, Faculty, Student).

STEP 6: Creating Flow Designer workflows for automation and notifications.

STEP 7: Building dashboards and performance analytics reports.

OUTCOME

The project 'Educational Organization Management System using ServiceNow' successfully developed a centralized digital platform for managing institutional operations. It streamlined workflows for student and faculty requests, automated approvals, and generated real-time reports. The system enhanced transparency, communication, and efficiency within the educational organization while reducing manual effort. This project strengthened practical knowledge in ServiceNow development, including table creation, form design, Flow Designer, scripting, and reporting.

CONCLUSION

The Educational Organization Management System on ServiceNow provides an effective solution for automating and managing academic and administrative tasks. With workflow automation, centralized data handling, and reporting tools, it simplifies operations, improves service delivery, and enhances institutional productivity. Its scalability and user-friendly interface make it adaptable to any educational organization.